

September 21, 2010

**CERTIFIED MAIL 7004 0750 0004 3317 5057**  
**RETURN RECEIPT REQUESTED**

Mr. Doug Griffin  
Project Manager  
Office of Land Quality  
Indiana Department of Environmental Management  
100 N. Senate Avenue  
Indianapolis, IN 46204

**Notification of Plan to Plug and Abandon Monitoring Well T1852**  
**Corrective Action Agreed Order**  
**Evonik Degussa Corporation, Tippecanoe Laboratories**  
**Facility ID Number IN 006050967**

Dear Mr. Griffin:

Eli Lilly and Company (Lilly) has been notified that a Tippecanoe County construction project to replace the existing vehicle bridge over the Norfolk & Southern railroad will begin soon. Monitoring well T1852 is within the area impacted by the construction project, therefore Lilly intends to plug and abandon T1852 because it is located within the proposed permanent road easement related to a new bridge spanning the Norfolk and Southern Railroad approximately 400 feet south of Lilly Road (see Attachment 1). Specific details regarding the planned plugging and abandonment are presented in the sections below.

### **Plugging and Abandonment Procedures**

Lilly will contract with an Indiana licensed well driller to plug and abandon T1852, as required by IC 25-39-4. The well, which is 6-inches in diameter and 127 feet deep with a 5-foot screen, is screened within the Unit III aquifer (see Attachment 2). The entire well casing will be plugged (completely filled) with an impervious grouting material to prevent migration of materials or fluids in the well. The well will be plugged from the bottom to within at least two feet of the ground surface with neat cement, bentonite slurry, or other suitable material, using a grout pipe placed initially at the bottom of the well and moved progressively upward as the well is filled, as specified in 312 IAC-13-10-2.

The most recent water sampled collected from T1852 (in Q3-2001) contained only one detectable chemical of concern (COC), chloroform. The concentration of chloroform was 0.36 ug/L (see Attachment 3), which is well below Indiana's 80 ug/L default residential standard

suitable for unrestricted use. Therefore, Lilly intends to allow any groundwater displaced from the well casing as it is being plugged to seep into the soil in the vicinity of the well.

After the well casing has been plugged it will be severed at least two feet below the ground surface and a cement plug larger in diameter than the borehole will be constructed over the borehole and covered with natural clay material to the ground surface, as required by 312 IAC 13-10-2 (e).

### **Notification Procedures**

Within 30 days after T1852 has been plugged, Lilly or its authorized agent will notify the Indiana Department of Natural Resources, Division of Water that the well has been abandoned, as required by 312 IAC 13-10-2 (f).

### **Justification for not Replacing T1852**

Lilly does not plan to replace T1852 once it has been abandoned for the following two reasons:

1. The well has not been used as a monitoring well for nine years (since Q3-01) because, when it was sampled, it rarely contained significant concentrations of COCs. Lilly had no plans to incorporate it into any future corrective action groundwater monitoring program.
2. Although T1852 has been used on a quarterly basis as a piezometer, data provided by nearby wells T1022, T1024, and T1887 (see Attachment 4) will be sufficient in the future for constructing accurate potentiometric surface maps.

### **Schedule**

Lilly intends to proceed with the plugging and abandonment of T1852 within the next two weeks, in order to meet the bridge construction schedule. At the next revision of the Ground Water QAPP for this site, Lilly will remove well T1852 from Table 1 "Quarterly Water Depth Gauging Locations."

Please contact me with any questions at (317)276-8989

Sincerely,

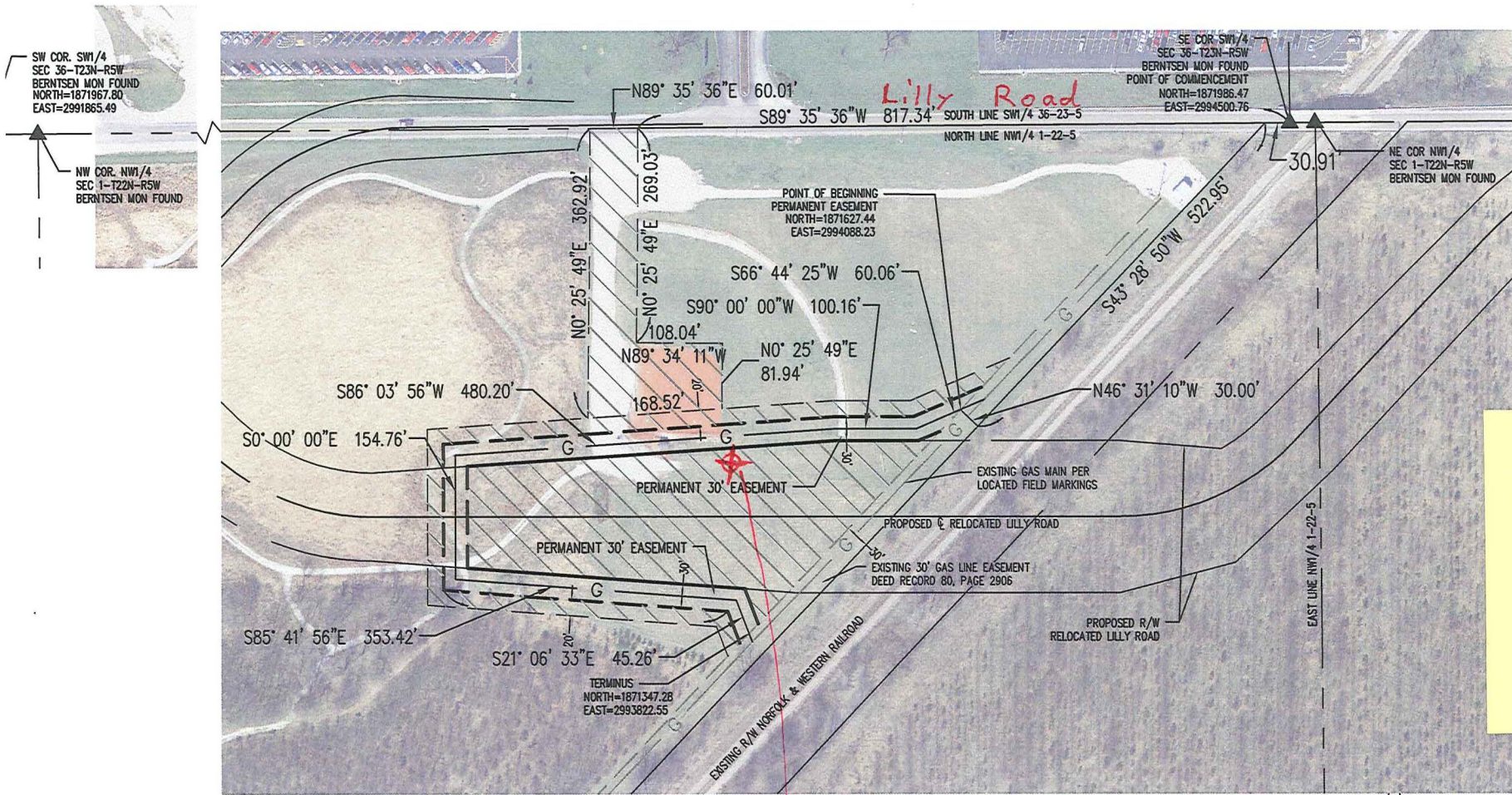


Philip L. Shinn, P.E.  
Consultant - HSE

cc: Don Heller – EPA Region V

THE SCHNEIDER CORPORATION  
 1330 WIN HENTSCHEL BLVD, SUITE 100  
 WEST LAFAYETTE, IN 47906-4156  
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 FAX: 765-448-6665  
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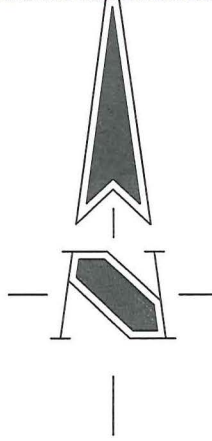
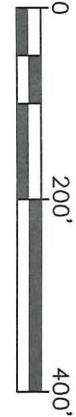
Attachment  
 1



T1852



— TEMPORARY EASEMENT



# Attachment

2

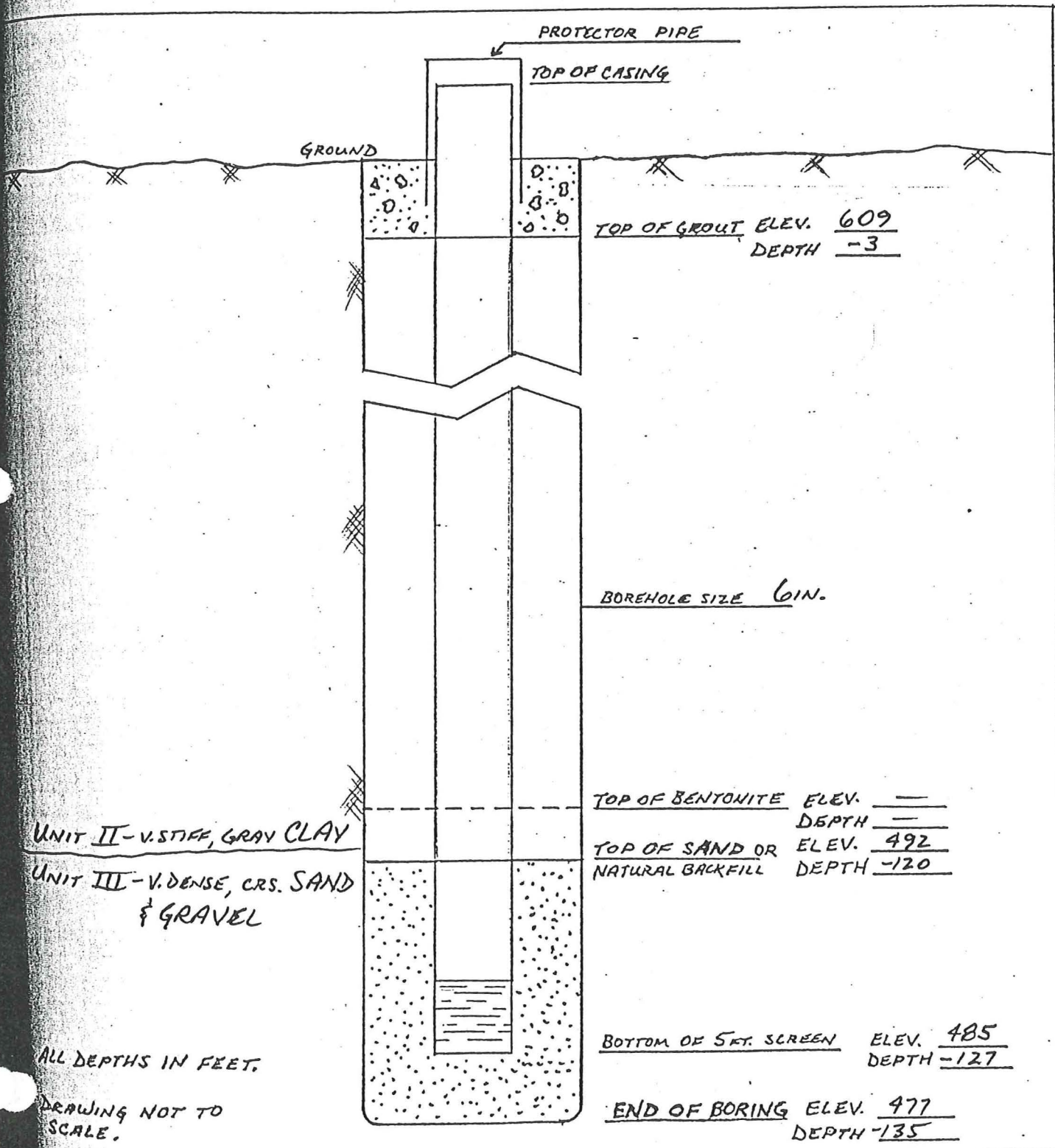
SKETCH

Project: \_\_\_\_\_

Well Number: 1852 (#3)

Coordinates: North -421.0049  
East 177.4407

Elevations: Ground 612.0  
T.O.C. 614.96



Engineer/Inspector: J.E. WRIGHT

# Full Summary (Unit III)

Quarter: 3 Year: 2001

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Attachment  
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Method

Parameter

Result

UOM

MDL

Qualifiers

Location: T1852

Field Data	CONDUCTIVITY	08/15/01	689.00	MHOS	-	
Field Data	DISSOLVED OXYGEN	08/15/01	2.90	MG/L	-	
Field Data	PH	08/15/01	7.13		-	
Field Data	TEMPERATURE	08/15/01	55.80	DEG F	-	

## Indicators

GP-TL-5007	SOLIDS-TOTAL	08/15/01	446.00	MG/L	2.40	
GP-TL-5008	DISSOLVED SOLIDS-TOTAL	08/15/01	436.00	MG/L	76.50	
GP-TL-5009	CHEMICAL OXYGEN DEMAND-TOTAL	08/15/01	-	MG/L	11.00	ND

## General Chemistry

GP-TL-5003	CHLORIDE	08/15/01	16.25	MG/L	0.02	
GP-TL-5003	NITRATE	08/15/01	0.00	MG/L	0.10	
GP-TL-5003	SULFATE	08/15/01	58.53	MG/L	0.05	
GP-TL-5006	BICARBONATE	08/15/01	363.00	MG/L	69.00	

## Volatile Organics Organic Compounds by Purge and Trap GC/MSD

GP-TL-5070	1,2-DICHLOROETHANE-D4	08/15/01	96.0000	%		
GP-TL-5070	P-BROMOFLUOROBENZENE	08/15/01	110.0000	%		
GP-TL-5070	TOLUENE-D8	08/15/01	109.0000	%		
GP-TL-5070	1,1,1-TRICHLOROETHANE	08/15/01	-	UG/L	0.0200	ND
GP-TL-5070	1,1,2-TRICHLOROETHANE	08/15/01	-	UG/L	0.0600	ND
GP-TL-5070	1,1-DICHLOROETHANE	08/15/01	-	UG/L	0.0200	ND
GP-TL-5070	1,2-DICHLOROETHANE	08/15/01	-	UG/L	0.0500	ND
GP-TL-5070	ACETONE	08/15/01	-	UG/L	0.6000	ND
GP-TL-5070	ACETONITRILE	08/15/01	-	UG/L	0.6000	ND
GP-TL-5070	BENZENE	08/15/01	-	UG/L	0.0200	ND
GP-TL-5070	CHLOROBENZENE	08/15/01	-	UG/L	0.0300	ND
GP-TL-5070	CHLOROFORM	08/15/01	0.3600	UG/L	0.0700	B
GP-TL-5070	DIETHYL ETHER	08/15/01	-	UG/L	0.1000	ND
GP-TL-5070	ETHYL BENZENE	08/15/01	-	UG/L	0.0500	ND
GP-TL-5070	HEXANE	08/15/01	-	UG/L	0.0400	ND
GP-TL-5070	METHYLENE CHLORIDE	08/15/01	-	UG/L	0.0900	ND
GP-TL-5070	M,P-XYLENE	08/15/01	-	UG/L	0.0900	ND
GP-TL-5070	O-XYLENE	08/15/01	-	UG/L	0.0400	ND
GP-TL-5070	P-CHLOROBENZOTRIFLUORIDE	08/15/01	-	UG/L	0.0500	ND
GP-TL-5070	TETRACHLOROETHYLENE	08/15/01	-	UG/L	0.0300	ND
GP-TL-5070	TETRAHYDROFURAN	08/15/01	-	UG/L	0.3000	ND
GP-TL-5070	TOLUENE	08/15/01	-	UG/L	0.0400	ND
GP-TL-5070	VINYL CHLORIDE	08/15/01	-	UG/L	0.0200	ND

## Volatile Organics Organic Compounds by Head Space GC

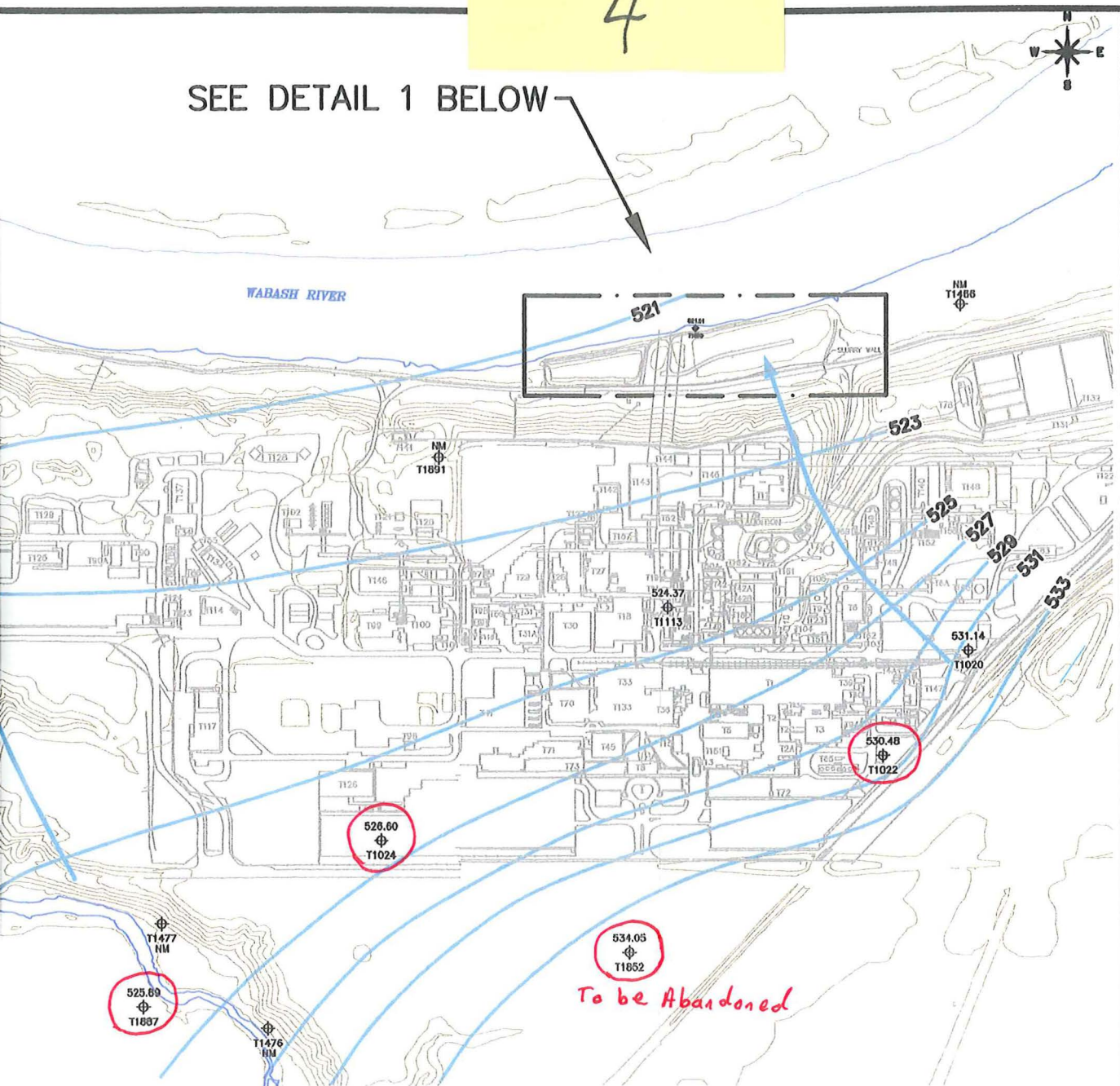
GP-TL-5011	METHANOL	08/15/01	-	MG/L	0.1000	ND
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## Semi-Volatile Organics Organic Compounds by Direct Injection GC/MSD

GP-TL-5058	2,4,6-TRIBROMOPHENOL	08/15/01	63.4500	%		
GP-TL-5058	NITROBENZENE-D5	08/15/01	55.2000	%		
GP-TL-5058	P-TERPHENYL-D14	08/15/01	60.5500	%		
GP-TL-5058	BIS(2-ETHYLHEXYL)PHTHALATE	08/15/01	0.0090	MG/L	0.0001	B
GP-TL-5058	DIMETHYL PHTHALATE	08/15/01	-	MG/L	0.0001	ND
GP-TL-5058	INDENO(1,2,3-C,D)PYRENE	08/15/01	-	MG/L	0.0001	ND
GP-TL-5058	N,N-DIETHYL ANILINE	08/15/01	-	MG/L	0.0001	ND
GP-TL-5058	PHENANTHRENE	08/15/01	-	MG/L	0.0001	ND

Attachment  
4

SEE DETAIL 1 BELOW



UNIT III POTENTIOMETRIC SURFACE  
MARCH 29, 2009

ELI LILLY AND COMPANY  
TIPPECANOE LABORATORIES  
LAFAYETTE, INDIANA

